status information printing method and a status information

printing system, all for use with such a medium.

The invention claimed in Claim 1 is a medium having a status

information printing program recorded thereon to be run on a host

computer in order for a printer to print status information. The

host computer and the printer are connected for two-way

communication. The medium causes the host computer to realize

an output initiation instruction monitor function for monitoring

the output initiation instruction for the status information

that the printer outputs through the two-way communication, a

status information acquisition function on the host side for

acquiring status information data from the printer through the

two-way communication, a printing data generation function for

generating printing data to be printed by the printer based on

the status information data acquired by the status information

acquisition function on the host side when the output initiation

instruction is recognized by the output initiation instruction

monitor function, and a printing data output function for

outputting to the printer through the two-way communication the

printing data generated by the printing data generation

function.

In the invention claimed in Claim 1, the printer and the

host computer are connected for two-way communication. The

status information is printed on the printer by processing the

status information printing program run on the host computer. For this reason, with the status information printing program run on the host computer, the output initiation instruction monitor function monitors the output initiation instruction for the status information outputted by the printer through the two-way communication. In the status information acquisition function on the host side, the status information data is acquired from the printer through the two-way communication. When the output initiation instruction monitor function distinguishes the output initiation instruction, the printing data generation function generates the printing data to be printed on the printer based on the status information data acquired by the status information acquisition function on the host side. Then, the printing data generation function outputs the printing data to the printer through the two-way communication.

In other words, the printing data is not generated by the printer itself, but it is generated on the host computer by transmitting the status information data from the printer to the host computer through the two-way communication. Although the printing data for printing the status information is based on the status information data, it is not necessary to distinguish on the host computer whether the printing data is status information or usual data. In short, the printing data is generated on the host computer by the same processing as the usual

printing job, and the generated printing data is transmitted to the printer, so that printing can be performed on the basis of the printing data. If this data is status information, the status information can be acquired as the result of the printing. Consequently, the printer requires no hardware for converting the status information data into printing data, and can be simple in structure.

In this way, the invention is embodied by the host computer realizing the output initiation instruction monitor function, the status information acquisition function on the host side, the printing data generation function, and the printing data output function. There are various methods of providing the program and various manners of running it to realize these functions. Since the functions manage printing processing, it is preferable that they be provided as drivers. Part or all of the functions may be realized by one or more applications. Drivers may be originally installed in the operating system of the host computer, and at least one of the functions may be installed so that all the functions can be materialized.

Thus, since the printer does not need to convert the status information data into printing data, it does not need to be equipped with an advanced processor. The printer can be simpler in structure depending on the type of printing data. As an example, the invention claimed in Claim 2 is the medium defined

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